

1010
P. 375

Work Order ID 104860

104860

July-22-13 11:28:23 AM

Page 1

Item ID: D3943-7

Accepted

N900040100

Setup Start *NSC1*

NS1

Revision ID:

Item Name: Stud

Start Date: 7/22/13

Start Qty: 40.00

40

Required Date: 8/05/13

Req'd Qty: 40.00

40

Reference:

Approvals

OC:

Date: 11-22-22 Tooling

Cust Item ID

Customer

Run Start *NIR1*

END1

OC:

Date: _____ SPC (Y/N) _____

Date _____

NIR2

NCR: Yes / No

DQA: Date:

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS										
				Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>								
				Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>								
				Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>								
				Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>									
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector							
Doc/Data																
Equip/Tooling																
Operator																
Material																
Setup																
Other																
Process																
Supplier																
Training																
Unapproved																
FAULT CATEGORY																
Landing Gear				General												
Bending	<input type="checkbox"/>			Bend	<input type="checkbox"/>			Grain	<input type="checkbox"/>			Ovalized	<input type="checkbox"/>			Pressure/Forced
Centre Not Concentric to O/S	<input type="checkbox"/>			BOM/Route	<input type="checkbox"/>			Hardware	<input type="checkbox"/>			Over/Under tolerance	<input type="checkbox"/>			Temperature/Cure
Cracks	<input type="checkbox"/>			Broken/Damaged	<input type="checkbox"/>			Inspection Incomplete	<input type="checkbox"/>			Part Incorrect	<input type="checkbox"/>			
Crushed/Crimped	<input type="checkbox"/>			Burrs	<input type="checkbox"/>			Instructions Incomplete/Unclear	<input type="checkbox"/>			Part Lost/Missing	<input type="checkbox"/>			Weld
Cuffs	<input type="checkbox"/>			Contamination	<input type="checkbox"/>			Maintenance	<input type="checkbox"/>			Part Moved	<input type="checkbox"/>			Wrong Stock Pulled
Heat Treat	<input type="checkbox"/>			Countersink	<input type="checkbox"/>			Mislabeled	<input type="checkbox"/>			Positioned Wrong	<input type="checkbox"/>			
Inspection Strip in Tube	<input type="checkbox"/>			Cut Too Short	<input type="checkbox"/>			Misread	<input type="checkbox"/>			Power Loss/Surge	<input type="checkbox"/>			Other
Ripples in Bend	<input type="checkbox"/>			Drill Holes	<input type="checkbox"/>			Offset	<input type="checkbox"/>				<input type="checkbox"/>			
Torque Waves in Extrusion	<input type="checkbox"/>			Drawing	<input type="checkbox"/>			Out of Calibration	<input type="checkbox"/>				<input type="checkbox"/>			
Turning Sequence	<input type="checkbox"/>			Finish	<input type="checkbox"/>			Out of Sequence	<input type="checkbox"/>				<input type="checkbox"/>			
Wave/Twist in Tube	<input type="checkbox"/>			Folio	<input type="checkbox"/>			Outside Dimensions	<input type="checkbox"/>				<input type="checkbox"/>			

Work Order ID 104860

July-22-13 11:28:23 AM

104860

Page 2

Item ID: D3943-7

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Stud

Stop

NS2

Start Date: 7/22/13 Start Qty: 40.00 *40*

Required Date: 8/05/13 Req'd Qty: 40.00 *40*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____ Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____ SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

120

QC

Quality Control

QC8- Inspect parts - second check

0.00

13-7-30

40

φ

130

130

Packaging

Packaging

Identify as per dwg & Stock Location: _____

0.00

Memo

WA004

0.00

13-8-01 (E)

140

140

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

MLJ 13-08-09

WF
13-8-01

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
Part No. _____			Thermoforming <input type="checkbox"/>	Machining <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
NCR No. _____			Work Order Update <input type="checkbox"/>	Finishing <input type="checkbox"/>	Composite <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Other <input type="checkbox"/>			
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other	

Picklist Print

July-22-13 11:28:27 AM

Page 1

Work Order ID: 104860

104860

Parent Item: D3943-7

D3943-7

Parent Item Name: Stud

Start Date: 7/22/13

Required Date: 8/05/13

Comments: Est Rev:A New Issue 09-06-03 JLM Verified By:EC IPP Rev:B
as per dwg REV.C DD 10.02.22 verified by:EC IPP REV:C 11.08.16
AS PER REV.E DD VERF:JLM

Start Qty: 40.00

Required Qty: 40.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M1010R0.375		Purchased		No		100	f	0.1000	0.02	0.842105			**

M1010R0 375

ROUND BAR .375

Location	Loc Qty	Loc Code
MAT038	0.1	
112886	0.1	

14 0AS
44 44
9 9 13/07/30

• Could not pull out!

NCR: Yes / No

DQA: Date:

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
				Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
				Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
				Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions							
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other							
				<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled							

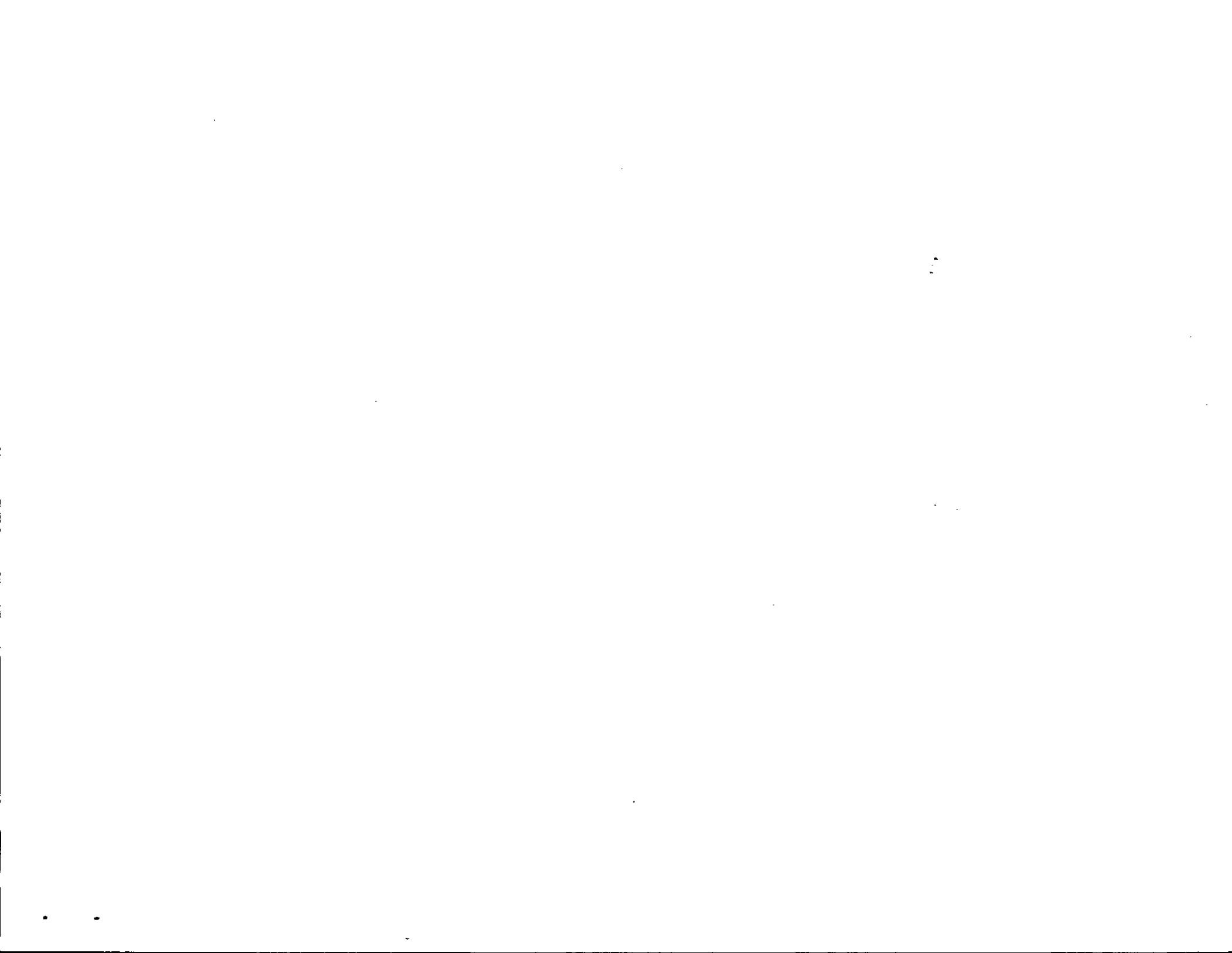
DART AEROSPACE LTD	Work Order:	1048603
Description: Stud	Part Number:	D3943-7
Inspection Dwg: D3943	Rev: E	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

5

Measured by:	<u>44</u> <u>9-89</u>	Audited by:	<u>SJ</u>	Preliminary Approval:	
Date:	<u>13/07/30</u>	Date:	<u>13-7-30</u>	Date:	

Rev	Date	Change	Revised by	Approved
A	09.06.11	New Issue	KJ	
B	12.05.15	Dimensions updated per Dwg Rev E	KJ	



ITEM No	QTY -041	QT -051	WTY -053	PART NUMBER	DESCRIPTION	PREFERRED SUPPLIER
1	X			D3943-041	GROUND HANDLING CRANK ASSEMBLY	
5	1	X		D3943-051	HANDLE ASSEMBLY	
6	1		X	D3943-053	CHAIN ASSEMBLY	
D	11	1		D3943-1	HANDLE	M/F HANDLE FROM DIS-ASSEMBLED ITEM 39
	12	1		D3943-3	HANDLE EXTENSION	
	13	1		D3943-5	PLATE	
	14	2		D3943-7	STUD	
	15		1	D3943-9	CHAIN	USE CHAIN SUPPLIED WITH ITEM 39
	16		1	D4405-1	EYE AND FORK SWIVEL	
	21	1		D2690-4	LANYARD	
	22	1		D3585-1	SET SCREW	
C	23	1		D3949-041	REMOVE BEFORE FLIGHT FLAG	
	24		1	D3954-5	CHAIN LUG	
	25	1		D3954-7	RATCHET LUG	
	26		1	D3954-9	GWT CHAIN PIN	
	31	1		AN5-11A	BOLT	
	32	1		AN960-516	WASHER	
	33	1		MS21042L5	NUT	
	39	1		8143919	LEVER CHAIN HOIST (POWER FIST)	PRINCESS AUTO / 4000 lbs CAPACITY
	51	1		S-1475	SPRING	REID SUPPLY
	52	1		3408A59	BALL PLUNGER	McMASTER CARR
	53	1		HX-15	SOCKET HEAD CAP SCREW 1/2-20 UNC X 0.75 LG	HASKINS
	54	1		HX-16	SOCKET HEAD CAP SCREW 1/2-20 UNC X 1.0 LG	HASKINS

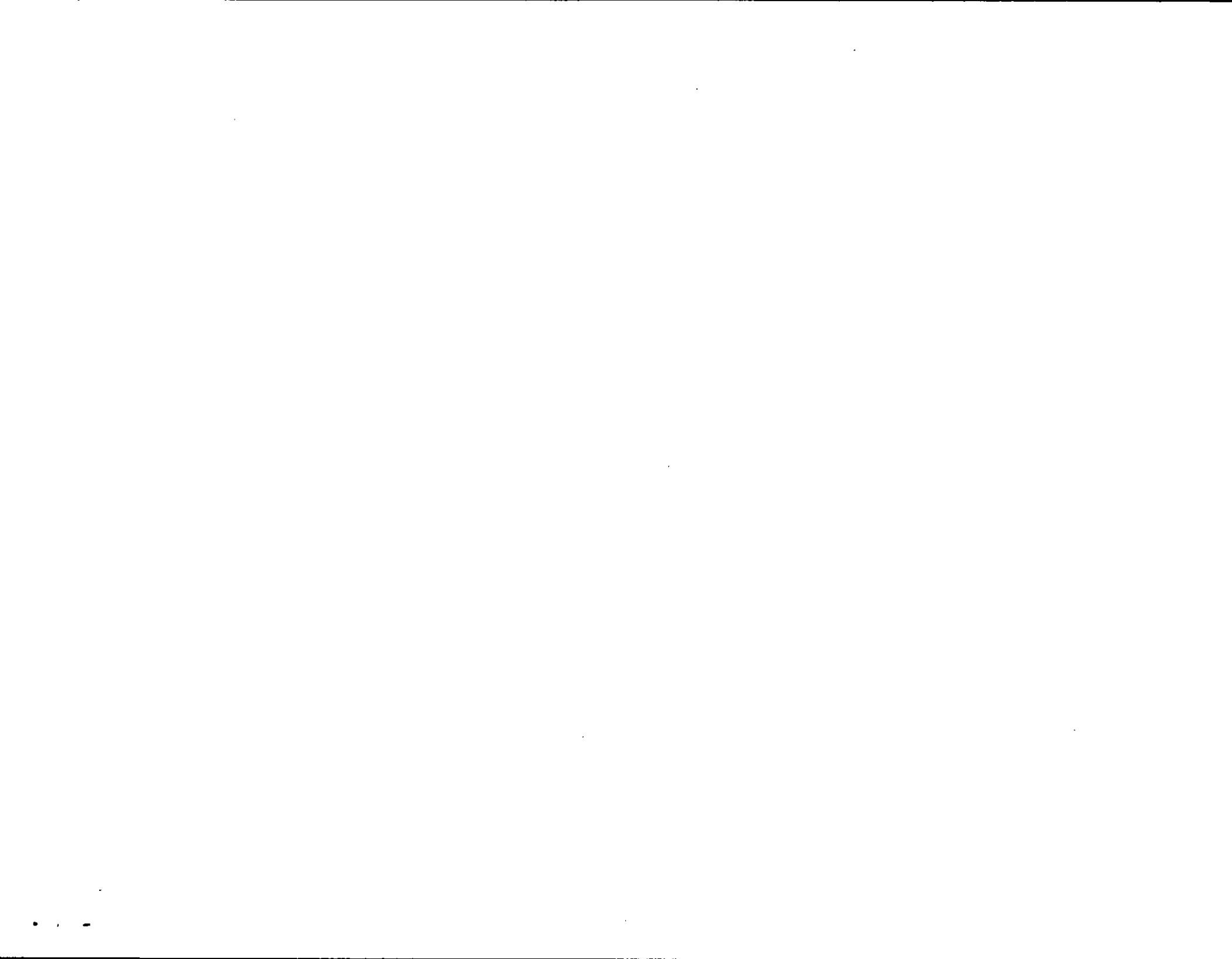
E

104860 MLJ
13-07-22

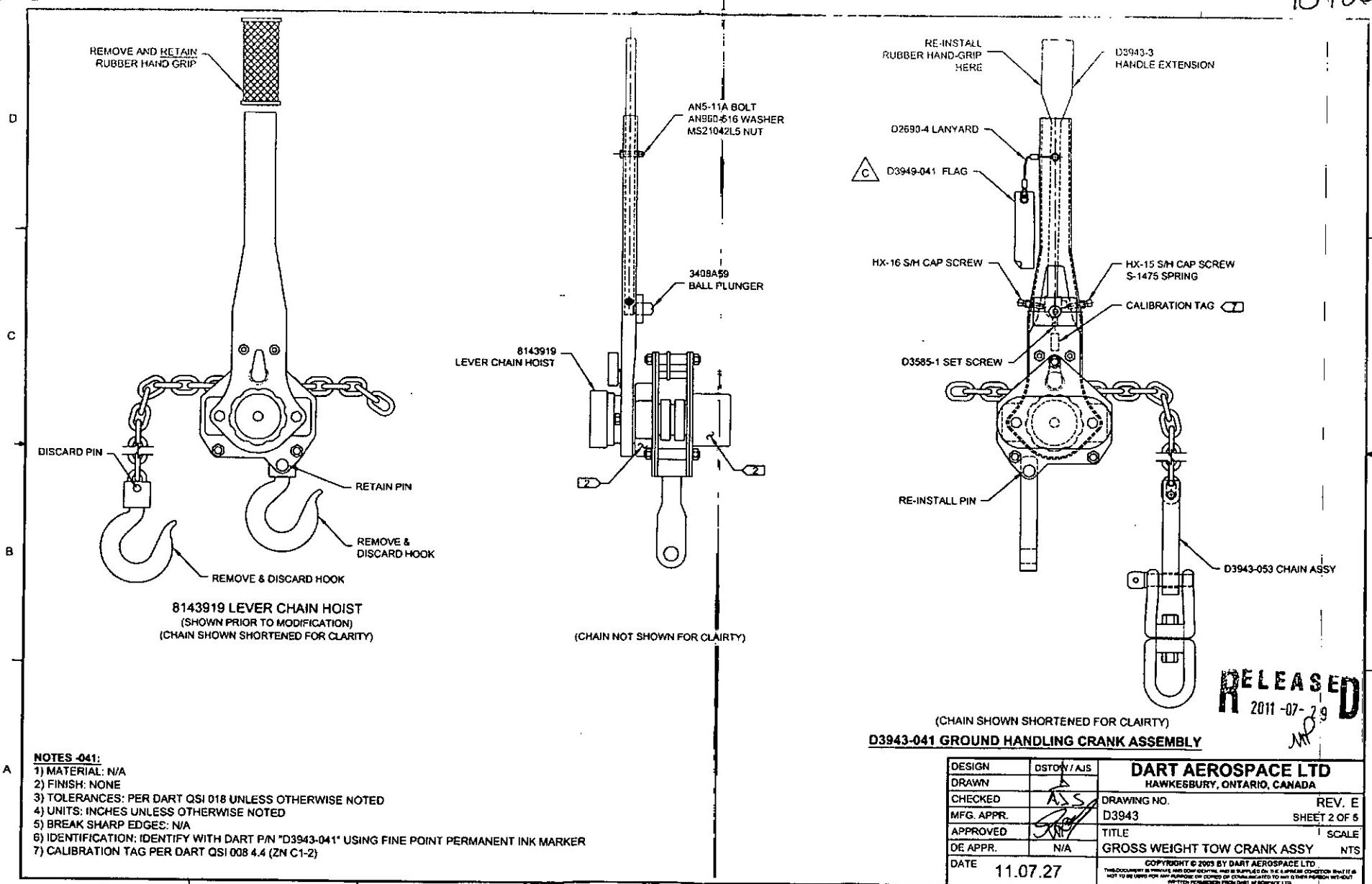
RELEASED
2011-07-22
MW

E	CHANGED D3943-3 MTL TO SS (B8-5); FINISH NOW "NONE" (A7-5); TAP DRILL FOR 1/4-20 UNF-2B WAS PILOT HOLE NOTE (B1-5). PER PAR11-113.	MB	11.07.27
D	SHT 1 PL. ITEMS 51-54 RENUMBERED SEE PREV. REV. FOR DETAILS, ITEM 16 ADDED (VIEWS UPDATED). SHT 2 ZN D3 FLAG RELOCATED, SHT 3 ZONE C3, Ø0.12 HOLE DELETED. (SEE NCR 11-495)	AJS	11.05.16
C	RMV FINISH -041 (Z1 A8-2), ADD NEW FINISH -051/-053/-1/3 (AB-3/4-5), ADD CALIBRATION (A8-2). (1) HX-16 WAS HX-15 (B3-1, C3-1). PAR 10-001	CP	10.01.26
B	SHT 1 PL. ITEM 31 WAS AN4-10A, ITEM 32 WAS AN960-416, ITEM 33 WAS MS21042-4, ITEM 43 WAS 0.75 LG. SHEETS 2 - 5 NOTES: FINISH FOR ALL COMPONENTS NOW YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.13
REV.	DESCRIPTION	BY	DATE
DESIGN	DSTON / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN		REV. E	
CHECKED	ASS	DRAWING NO.	
MFG. APPR.		D3943	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.	N/A	GROSS WEIGHT TOW CRANK ASSY	NTS
DATE	11.07.27	COPYRIGHT © 1999 BY DART AEROSPACE LTD. THIS DOCUMENT CONTAINS TRADE SECRET INFORMATION THAT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 1 7 6 1 5 4 3 2 1

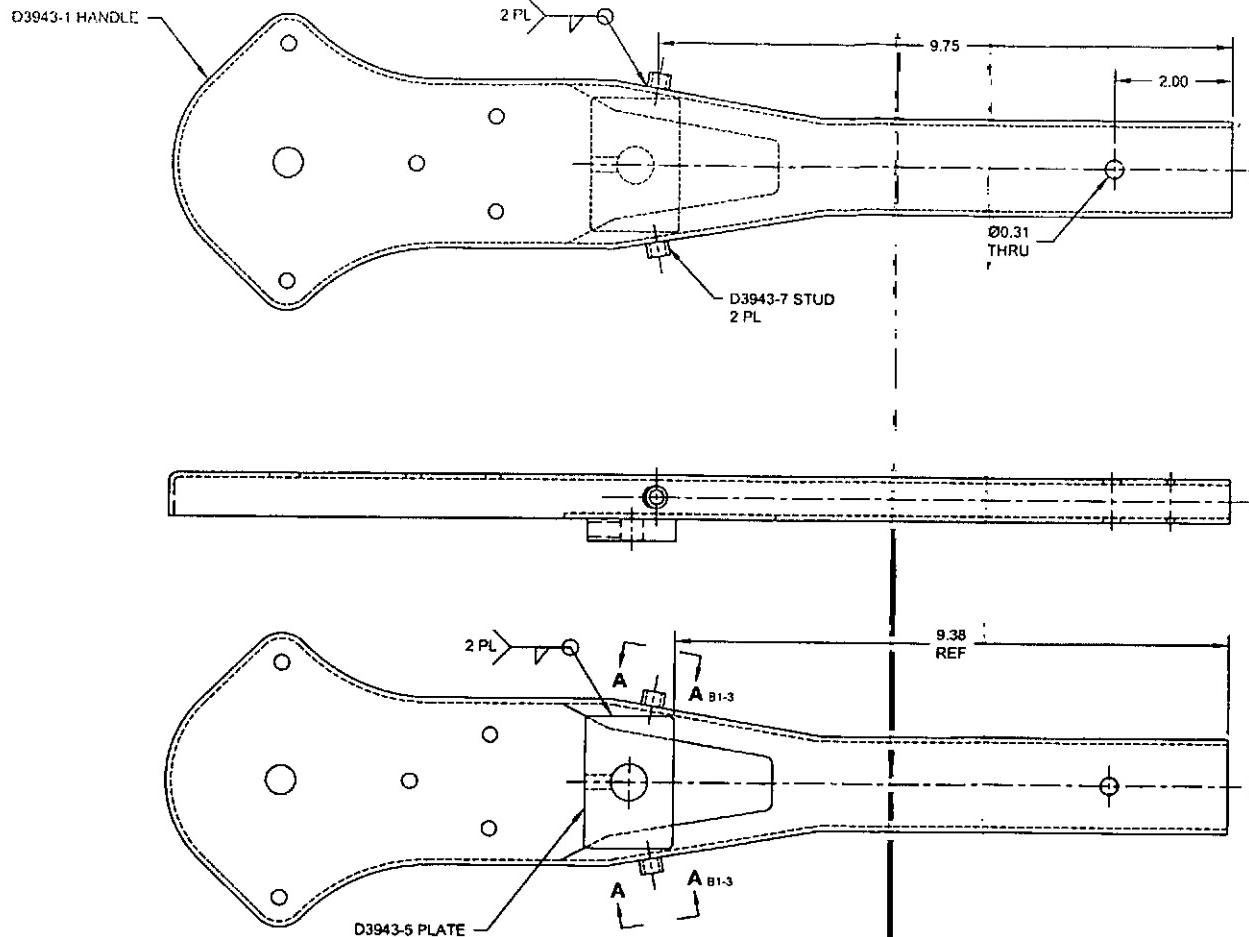
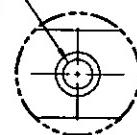


104860





104860

THREAD $\frac{1}{2}$ -20 UNC-2B
THRUVIEW A-A A5-3
(SCALE 2X) B5-3

NOTES -051:

- 1) MATERIAL : N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: X.XX DIMENSIONS +/- 0.06 ALL OTHERS
PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) MASK ALL THREADS PRIOR TO FINISHING

D3943-051 HANDLE ASSEMBLY

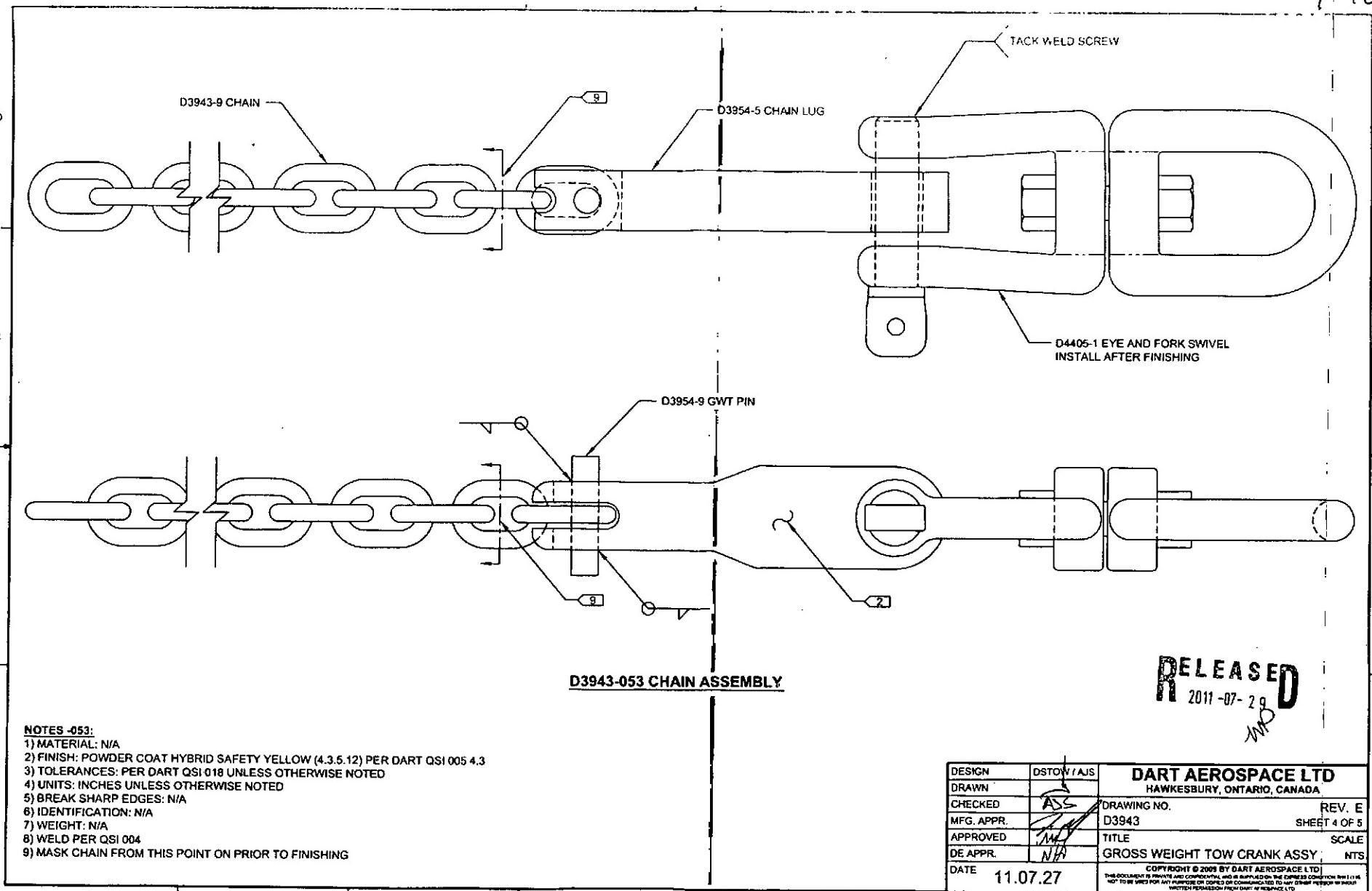
8 7 6 5 4 3 2 1

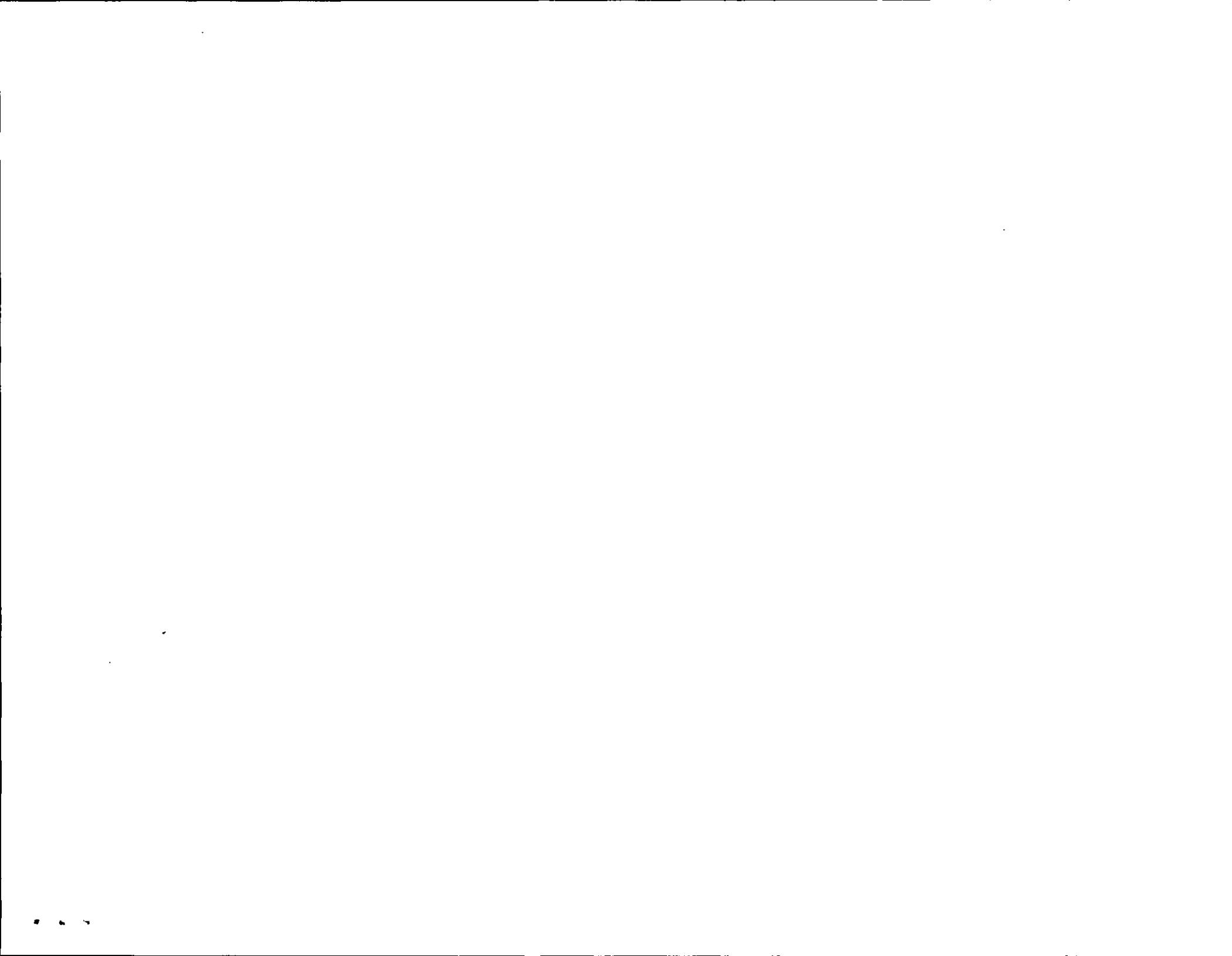
DESIGN	DSTO / AJS	DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED	AJS	REV. E
MFG. APPR.		DRAWING NO.
APPROVED		D3943
DE APPR.	N/A	SHEET 3 OF 5
DATE	11.07.27	TITLE
		GROSS WEIGHT TOW CRANK ASSY
		NTS

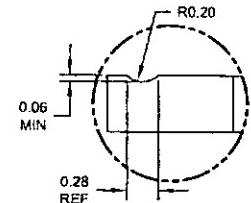
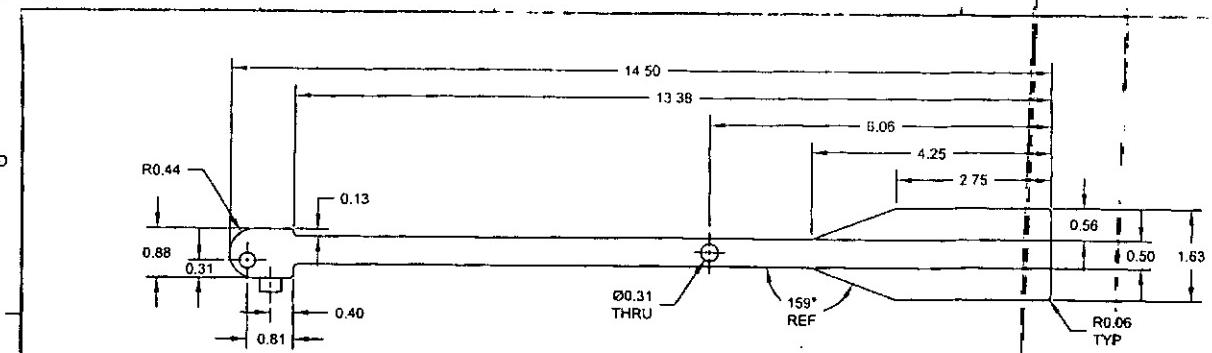
RELEASED
2011-07-20
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164860







DETAIL B-B C7-5
(DIMPLE DETAIL)
(SCALE 2X)

DETAIL B-B C2-5

0.25 0.38

D3943-3 HANDLE EXTENSION

NOTES:

- 1) MATERIAL -3: AISI 304/316 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASME SA240
SEE PART BSSC M20-12

REF DRAFT SPEC
2B

- OR:
AISI 303 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
ASTM A240 OR ASME SA240
REF DART SPEC M303S

-5: MILD STEEL, SHEET

- AISI 1010-1025 OR ASTM A36/A366/A1008
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-S

OR:

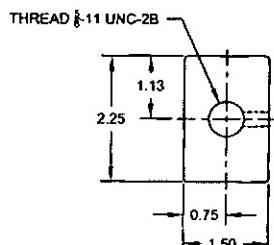
- MILD STEEL, BAR
AISI 1010-1025 OR ASTM A36/A366/A569/A570
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-B

-7' MILD STEEL ROUND BAR

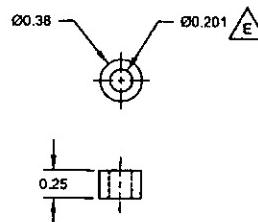
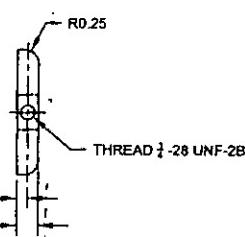
- 1. MILD STEEL, ROUND BAR
AISI 1018-1025
PER MIL-S-7097
REF DART SPEC M1018-R

2) FINISH: NONE

- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A



D3943-5 PLATE



D3943-7 STUD

RELEASED
2011-07-29

DESIGN	DSTOW / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN				
CHECKED	<i>A/S</i>	DRAWING NO.	REV. E	
MFG. APPR.		D3943	SHEET 5 OF 5	
APPROVED	<i>N/A</i>	TITLE	SCALE	
DE APPR.	<i>N/A</i>	GROSS WEIGHT TOW CRANK ASSY : NTS		
DATE	11.07.27	COPYRIGHT © 2009 BY DART AEROSPACE LTD. THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION AND IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT		

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1